

Date: Thursday, 2/14/2008 10:39:35 AM
 User: Kim Johnston

Process Sheet

Customer : CC-DAR01 Dart Aerospace Ltd. Drawing Name : COBRA SKIDTUBE ASS'Y
 Job Number : 37407
 Estimate Number : 13182
 P.O. Number :
 This Issue : 2/14/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D209669013
 First Issue : 1/1 Type : LANDING GEAR Drawing Number : D209-669-013
 Previous Run : 37406 Drawing Revision : B
 Material :
 Due Date : 3/10/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : New est. 08.02.13 LL, verified by:DD

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



KS 08.02.08

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP d209-669-011 CHG004 002 u

2.0 37407A COBRA SKIDTUBE ASS'Y



Comment: Sub-Component COBRA SKIDTUBE ASS'Y

3.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick: Packing Kit

4.0 D2570 Bushing



Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 D2570 Bushing M36480

8/3/10 SQ

(1X)

5.0 D27361 Lug Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2736-1 Bracket M36390

8/3/17

SQ

(1X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407

Part Number: D209669013

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D27363

Lug Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2736-3 Bracket M35061

sq

7.0

D29171

Saddle LH



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Saddle LH

batch B 37420

sq

8.0

D29181

Saddle LH



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Saddle LH

batch B ~~37420~~ 37421

sq

9.0

D2929

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Spacer

batch M21295

sq

10.0

D2930

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Spacer

batch M21295

sq

11.0

D2968041

Tow Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Tow Ring

batch M31957

8/3/7

sq

12.0

AN47A

Bolt



Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

Bolt

batch M102440

8/3/10

sq

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 37407

Part Number: D209669013

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

AN446A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN4-46A Bolt

M106277

SD

14.0

AN451A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bolt

batch M106662

SD

15.0

AN536A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

batch M106993

SD

16.0

AN960JD416

Washer



Comment: Qty.: 32.0000 Each(s)/Unit Total : 32.0000 Each(s)

Washer

batch M106277

SD

17.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Washer

batch M106654

SD

18.0

AN9704

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Washer

batch M105448

SD

19.0

MS21042L4

Nut



Comment: Qty.: 29.0000 Each(s)/Unit Total : 29.0000 Each(s)

Nut

batch ~~M105938~~

M105938

8/3/10 SD

(IX)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 08/03/19
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Date: Thursday, 2/14/2008 10:39:35 AM
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Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407

Part Number: D209669013

Job Number:



Seq. #:

Machine Or Operation:

Description:

20.0

MS21042L5

Nut



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Nut

batch

M106211

8/3/10

SL

(12)

21.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

0803.17

(7)

22.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D209-669-013

Location:

37407 Rev B

08/03/13

(1)

23.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

AD 08/03/13

Job Completion



08/03/17

37407A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

4.0 WEIGHT AND BALANCE

The following weight and balance information is for the replacement Dart parts. The weight and balance of the skidtubes that are being removed from the aircraft is the responsibility of the installer.

Installation	Weight	LONGITUDINAL	
		Arm	Moment
D209-669-011/-012	49.6 lb	170.4 in	8452 in lb
SKIDTUBE INSTALLATION	22.5 kg	4.33 m	97.4 m kg
D209-669-013/-014	43.8 lb	176.5 in	7731 in lb
SKIDTUBE INSTALLATION	19.9 kg	4.48 m	89.2 m kg

5.0 PARTS LIST

Item	Qty -011	Qty -012	Qty -013	Qty -014	Qty -041	Qty -043	Part Number	Description
	X						D209-669-011	SKIDTUBE INSTALLATION, LH (AH-1W/J)
		X					D209-669-012	SKIDTUBE INSTALLATION, RH (AH-1W/J)
			X				D209-669-013	SKIDTUBE INSTALLATION, LH (AH-1P/F/S)
				X			D209-669-014	SKIDTUBE INSTALLATION, RH (AH-1P/F/S)
	1	1			X		D209-669-041	REPLACEMENT SKIDTUBE (AH-1W/J)
			1	1		X	D209-669-043	REPLACEMENT SKIDTUBE (AH-1P/F/S)
1A					1		D2906-041	SKIDTUBE ASSEMBLY
1B						1	D2906-043	SKIDTUBE ASSEMBLY
2	1		2				D2917-1	OUTER SADDLE (FWD, LH)
3		1		2			D2917-2	OUTER SADDLE (FWD, RH)
4	1		2				D2918-1	INNER SADDLE (FWD, LH)
5		1		2			D2918-2	INNER SADDLE (FWD, RH)
6	1						D2919-1	OUTER SADDLE (AFT, LH)
7		1					D2919-2	OUTER SADDLE (AFT, RH)
8	1						D2920-1	INNER SADDLE (AFT, LH)
9		1					D2920-2	INNER SADDLE (AFT, RH)
10	8	8	8	8			AN4-51A	BOLT
11	16	16	16	16			D2570	BUSHINGS
12	8	8	8	8			MS21042L4	NUT (OR MS21042-4)
13	2	2	4	4			AN5-36A	BOLT
14	2	2					AN5-41A	BOLT
15	8	8	8	8			AN960JD516	WASHER
16	4	4	4	4			MS21042L5	NUT (OR MS21042-5)
17	16	16	16	16			AN4-7A	BOLT
18	32	32	32	32			AN960JD416	WASHER
19	16	16	16	16			MS21042L4	NUT (OR MS21042-4)

CONTINUED ON NEXT PAGE

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Revision: **B**

Date: 07.08.23

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WITHOUT NOTICE
WORK ORDER
NO. 37407

CONTINUED FROM PREVIOUS PAGE

20	2	2	2	2			D2929	SPACER
21	2	2	2	2			D2930	SPACER
*30A					1	1	D3564-9	WEARSHOE (REPLACES D2577-1)
*30B					1	1	D3566-1	GASKET
*31A					1		D3564-15	WEARSHOE (REPLACES 18" D2577-5)
*31B					1		D3566-15	GASKET
*32A					1	1	D3564-11	WEARSHOE (REPLACES D2577-3)
*32B					1	1	D3566-1	GASKET
*33A					1	1	D3564-5	WEARSHOE (REPLACES D2577-5)
*33B					1	1	D3566-5	GASKET
*34					50	44	AN3C4A	BOLT (REPLACES AN3-4A)
*35					50	44	AN960C10L	WASHER (REPLACES AN960JD10L)
*36					50	44	AKS7-1032-130	INSERT (OR ALS7-1032-130, OR ALS4-1032-130, OR AKS4-1032-130)
*37					12	14	D2594-1	PLUG
*38					12	14	D2594-3	O-RING
*40					2	2	D2855	AFT CAP
*41					4	4	AN3-5A	BOLT
*42					4	4	AN960JD10L	WASHER
*43					4	4	AKS7-1032-225	INSERT (OR ALS7-1032-225, OR ALS4-1032-225, OR AKS4-1032-225)
50	4	4	1	1			D2736-1	GHW LUG
51	8	8	4	4			AN4-46A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21042L4	NUT (OR MS21042-4)
54			1	1			D2736-3	LUG ASSEMBLY
60	1	1	1	1			D2968-041	TOW RING
61	1	1	1	1			AN970-4	WASHER
62	1	1	1	1			MS21042L4	NUT (OR MS21042-4)

* DENOTES THAT PART IS INCLUDED WITH D2906-041/-043 SKIDTUBE ASSEMBLY

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Revision: B

Date: 07.08.23

SLY 14/03

Date: Thursday, 2/14/2008 10:39:53 AM
User: Kim Johnston

Process Sheet

Customer	: CC-DAR01 Dart Aerospace Ltd.	Drawing Name	: COBRA SKIDTUBE ASS'Y
Job Number	: 37407A		
Estimate Number	: 13181		
P.O. Number	:	Part Number	: D209669043
This Issue	: 2/14/2008 S.O. No. :	Drawing Number	: D2906 REV.B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1/1 Type : LANDING GEAR	Drawing Revision	: B
Previous Run	: 37406A	Material	:
Written By	:	Due Date	: 3/10/2008 Qty: 1 Um: Each
Checked & Approved By	: <u>JA 08 02 14</u>		
Comment	: new est. 08.02.13 LL, verified by: DD		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy D209-669 bluefile & type labels per PPP D205-669-041 chg 001

N/A JA

2.0	D25001190	Ext'n -1' Beam Tube 4"
-----	-----------	------------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2500-1-190	Skid Tube Extrusion	34729 SL 8-2-19

3.0	D29263	Web
-----	--------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

batch 37422 SL 8-2-26

4.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
-----	----------------	-------------------------



Comment: LANDING GEAR RESOURCE 1

1- Inspect mat'l D2500-1-190 for damage

2-Cut D2500-1-190 per Dwg D2906 if necessary Deburr ends

3-Acid etch and Alodine tube per QSI 005 4.1

SL 8-2-19
SL 8-2-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407A

Part Number: D209669043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Q.M 08.02.26

6.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes using drill jig DT8149, DT8711-2 & DT8711-3 (Do not use cutting fluid)

2-Open holes to 0.500" as per Dwg D2906 without cutting fluid

3-Countersink holes as per Dwg D2906 without cutting fluid

4-Deburr and blow out all chips from inside of tube

5-Bond web in place per QSI 015. Allow 12 Hrs. cure time before cutting

Pick:

Qty Part Number Description Batch

A/R Sikaflex-291 *105588*

Sikaflex expire date: *8-731*

Start Time: *2:25* Date: *8-2-26*

Fin Time: *8:00am* Date: *08/03/08*

pick:

Qty P/N description B/N

1 D2926-3 Web *37422*

7.0

BENDING

BENDING MACHINE



Comment: BENDING MACHINE

1-Bend as per program COB41FWD & COBRAFT on CNC Bender and Folio FT

2-Cut tubes as per Dwg. D2906 & per template DT8185B & DT8185BC

JB/EL 8-3-3

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr ends

2-Prepare tube for welding, remove alodine as required.

> DP 8-3-4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D209-669-043 PAR #: N/A Fault Category: Prod/Landing Gear NCR: Yes No DQA: 22 Date: 08/03/19
 QA: N/C Closed: 19 Date: 08/03/19

NCR: <u>37407A</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>0802-26</u>	<u>6-0</u>	<u>mid-section of drill sig was installed backwards and employee did not verify the sig ass'y correctly.</u> <u>R/C! Employee error</u>	<u>[Signature]</u>	<u>scrap: replace qty 1</u> <u>B 34729</u>	<u>SL</u> <u>8-2-26</u>	<u>[Signature]</u> <u>0803/04</u>	<u>[Signature]</u> <u>0802-26</u>	<u>[Signature]</u> <u>0802-26</u>

NOTE: Date & initial all entries

Date: Thursday, 2/14/2008 10:39:53 AM
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Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407A

Part Number: D209669043

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/08/04

10.0

D2579

Crossbolt Spacer



Comment: Qty.: 19.0000 Each(s)/Unit Total: 19.0000 Each(s)

Pick:

Qty

Part Number

Description

Batch

19

D2579

Spacers

237275

BE 08/03/04

11.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld crossbolt spacers D2579 as per Dwg. D2906 and QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R

Aluminum Rod

12106762

BE 08/03/04

2-Grind welds as per Dwg D2906 Grind flush ridge made from bending

8-3-4

3-Drill holes for wearplates using DT2906-043T1 Open holes to 19/64", adjust stopper not to hit web. Debur

4-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2909, Debur holes

5-Drill pilot holes for aft & fwd cap using DT8025 open holes to #6" Debur

6-Drill pilot holes for Tow ring using DT8091-3 , open to .640" and Debur

SL 8-3-4

12.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 08-03-05

13.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/03/05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number:



Seq. #:

Machine Or Operation:

Description :

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(1X)

Comment: HAND FINISHING RESOURCE #1
Pressure wash as per QSI 005

M-1

08/03/05

15.0

POWDER COATING

POWDER COATING



(1X)

Comment: POWDER COATING
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

M 107005

M-1

08/03/05

16.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL

08/03/05 (1)

17.0

D2855

Cap



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Cap
Batch: 035663

FL

18.0

AN35A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Bolt
Batch: M100188

FL

19.0

AN960JD10L

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Washer
Batch: M104885

FL

20.0

ALS71032130

Insert



Comment: Qty.: 44.0000 Each(s)/Unit Total : 44.0000 Each(s)
Insert
OR PER QSI 017
Batch: M105730

FL

08/03/05

*

(1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407A

Part Number: D209669043

Job Number:



Seq. #:

Machine Or Operation:

Description :

21.0

AN3C4A

BOLT



Comment: Qty.: 44.0000 Each(s)/Unit Total : 44.0000 Each(s)

BOLT

Batch: m107008

FL

22.0

AN960C10L

washer



Comment: Qty.: 44.0000 Each(s)/Unit Total : 44.0000 Each(s)

washer

Batch: m107008

FL

23.0

D25943

O-Ring



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

O-Ring

Batch: 629908

FL

24.0

D25941

Plug



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Plug

Batch: 636237

FL

25.0

D35649

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

batch: 637238

FL

26.0

D356411

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

batch: 637213

FL

27.0

D35645

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

batch: 637212

FL 08/03/05 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/14/2008 10:39:53 AM
User: Kim Johnston

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407A

Part Number: D209669043

Job Number:



Seq. #:

Machine Or Operation:

Description :

28.0

D35661

GASKET



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

GASKET

batch

B37410

FL

29.0

D35665

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

batch

B37411

FL

30.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearplates as per Dwg. D2906. Use a drop of Sikaflex on insert holes before installing wearplates

A/R

Sikaflex-291

M105585

Sikaflex expire date: 08-07

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2906

3-Inspect for foreign object per QSI 024

4-Install D2855 Fwd & Aft Cap as per Dwg D2906 and seal Fwd & Aft Cap with Sikaflex. Clean excess adhesive

A/R

Sikaflex-291

M105585

Sikaflex expire date: 08-07

5-Wing Walk as per Dwg D2906 and QSI 005 4.4

Batch:

M106894

FL
08/03/05

①

31.0

QC5

INSPECT WORK TO CURRENT STEP.



08/03/06

Comment: Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

32.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D209-669-041

Location:

PA 37407

PPP Rev:

Rev B

AS 08/03/12

(4)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 2/14/2008 10:39:53 AM
User: Kim Johnston

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: COBRA SKIDTUBE ASS'Y

Job Number: 37407A

Part Number: D209669043

Job Number:



Seq. #:

Machine Or Operation:

Description :

33.0

QC21

FINAL INSPECTION/W/O RELEASE



②

Comment: FINAL INSPECTION/W/O RELEASE

D 08/03/19

Job Completion



u 08-03-17

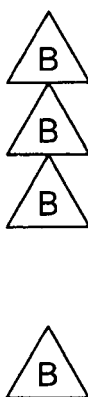
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



QTY -041	QTY -043	Part Number	Description
X		D2906-041	SKIDTUBE ASSEMBLY
	X	D2906-043	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
22	19	D2579	CROSS BOLT SPACER
12	14	D2594-1	PLUG
12	14	D2594-3	O-RING
2	2	D2855	AFT CAP
1		D2926-1	WEB
	1	D2926-3	WEB
1	1	D3564-9	WEARSHOE (REPLACES D2577-1)
1	1	D3564-11	WEARSHOE (REPLACES D2577-3)
1	1	D3564-5	WEARSHOE (REPLACES D2577-5)
1		D3564-15	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1		D3566-15	GASKET
50	44	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or ALS4-1032-130	INSERT
50	44	AN3C4A	BOLT
4	4	AN3-5A	BOLT
50	44	AN960C10L	WASHER
4	4	AN960JD10L	WASHER

GENERAL NOTES:

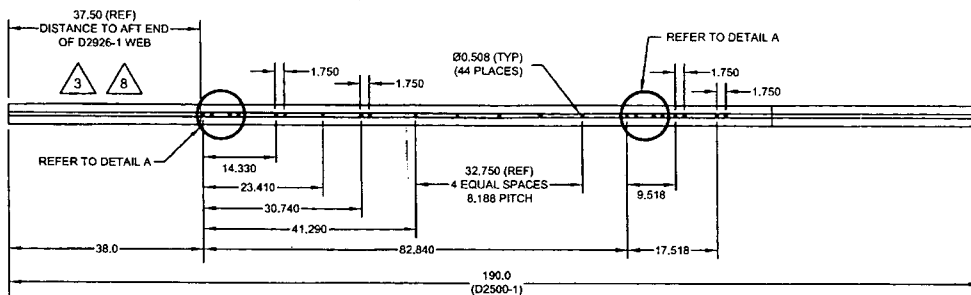
- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) LENGTH OF D2500-1 EXTRUSION BEFORE BENDING = 190 INCHES.
- 3) INSERT D2926-1/-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 6) USE DART DRILL TEMPLATE DT2906-041T1 (D2906-041) OR DT2906-043T1 (D2906-043) TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION C-C AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/291.
- 7) WELDING TO BE DONE PER DART QSI 004.
- 8) FINISH:
ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2926-1/-3 WEB. POWDER COAT ASSEMBLY WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- 9) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (12 PLACES).
- 10) ALL DIMENSIONS ARE IN INCHES.

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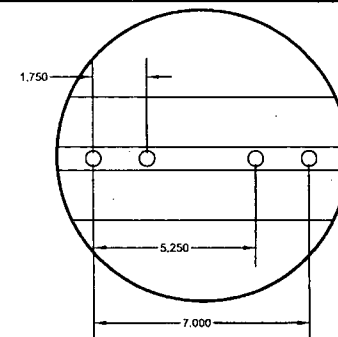
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07.09.04

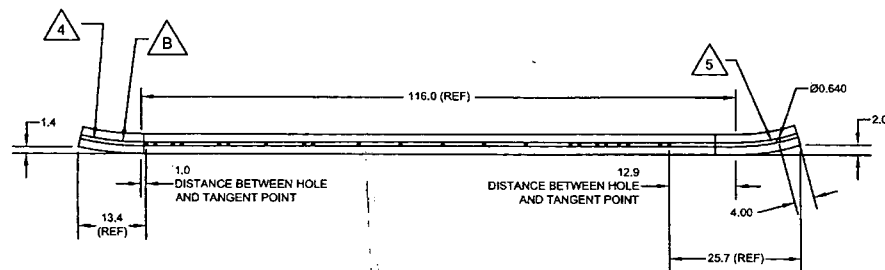
B	UPDATE DRAWING FORMAT; RE-ORGANIZE; ADD STAINLESS STEEL WEARPLATES AND GASKETS CHANGE WEARPLATE HARDWARE TO SS; PG 1: ADD NOTE 10; PG 2 C7: REMOVE AFT Ø0.640 HOLE FROM -041; PG 3 C3: CORRECTED -043 CAP P/N; PG 3 D7: 38 PLACES WAS 44 PLACES;	CB	07.08.21
A	NEW ISSUE	CP	04.06.22
REV.	DESCRIPTION	BY	DATE
DESIGN	97	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. B
MFG. APPR.	21	D2906	SHEET 1 OF 3
APPROVED	40	TITLE	SCALE
DE APPR.	40	AH-1 (209) SKIDTUBE ASSEMBLY NTS	
DATE	07.08.21	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



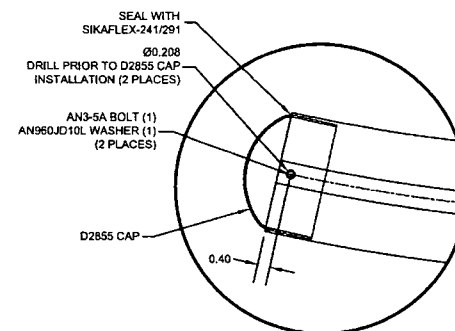
D2906-1 DRILLING DETAIL



DETAIL A
SCALE 1:4



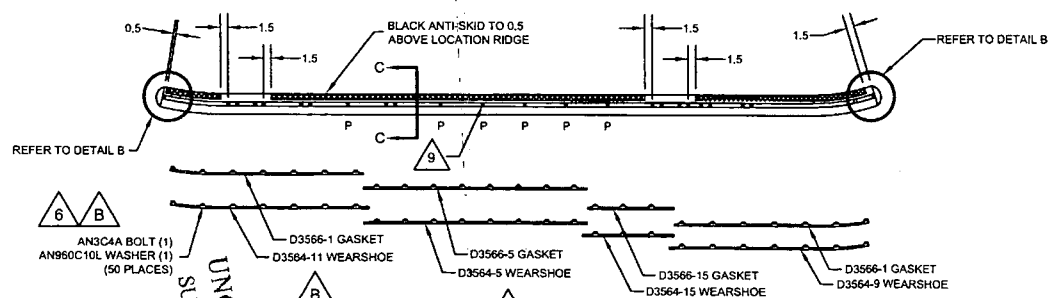
D2906-041 BENDING AND CUTTING DETAIL



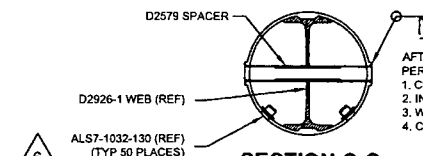
DETAIL B
SCALE 1:4

RELEASED

07.09.04 #



D2906-041 ASSEMBLY DETAIL



SECTION C-C
SCALE 1:4

**AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:**

- 1. CHAMFER HOLE 0.050 X 45°**
- 2. INSERT D2579 SPACER (22 PLACES)**
- 3. WELD INTO PLACE AND GRIND FLUSH**
- 4. CBORE D2579 SPACER TO Ø0.437 X 1.00 DEEP**

DESIGN	<i>Q</i>	DART AEROSPACE LTD	
DRAWN	<i>CB</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>PH</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>Q1</i>	D2906	SHEET 2 OF 3
APPROVED	<i>AP</i>	TITLE	SCALE
DE APPR.	<i>AP</i>	AH-1 (209) SKIDTUBE ASSEMBLY	1:24
DATE	07.08.21	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	

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**AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:**

- 1. CHAMFER HOLE 0.050 X 45°**
- 2. INSERT D2579 SPACER (22 PLACES)**
- 3. WELD INTO PLACE AND GRIND FLUSH**
- 4. BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP**

WORK ORDER
NO. 37407A

NO. 141

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Borlay E
Joint Welding Procedure GTAW
Part number and Job number D 305 64 01 / B36721A

TEST WELDS REQUIRED

BASE METAL Aluminium
Penetration Complete ☐ Partial ☒
Current AC ☒ DC ☐
WELDING PROCESS TIG
Single Weld ☒ Double Weld ☐
Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 02-02-01 Qualifier Pat Nival